

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed July 1, 2005 (Paper No. 20050617). Upon entry of this response, claims 95-118 are pending in the application. In this response, claims 95-118 have been added, and claims 1, 5-7, 10, 31, 34, 35, 38, 50, 53, 54, 57, 90, 92 and 93 have been cancelled. Applicant respectfully requests that the amendments being filed herewith be entered and request that there be reconsideration of all pending claims.

1. **Election/Restriction Requirement**

The Office Action requires the Applicant to elect to prosecute one of two groups of claims identified in the Office Action as follows:

Group I (Claims 1-15, 31-38, 50-57, 90, 92, and 93) drawn to A generalized convolution encoder comprised of a plurality of computational elements for adaptively adjusting the constraint length of the convolutional code, classified in class 714, subclass 774; and

Group II (Claims 16-28 and 91), drawn to A generalized convolution encoder comprised of a plurality of convolutional encoders, classified in class 714, subclass 786.

Applicant respectfully elects to prosecute the claims in Group I (1-15, 31-38, 50-57, 90, 92, and 93) without traverse. Claims 16-28 and 91 are cancelled without prejudice, waiver, or disclaimer. Applicant reserves the right to pursue the subject matter of these cancelled claims in a continuing application, if Applicant so chooses, and does not intend to dedicate any of the cancelled subject matter to the public. Applicant expressly reserves the right to present cancelled claims 16-28 and 91, or variants thereof, in continuing applications to be filed subsequent to the present application.

2. Rejection of Claims 31-38, 50-57, 92 and 93 Under 35 U.S.C. §112, first paragraph

Claims 31-38, 50-57, 92 and 93 are rejected under 35 U.S.C. §112, first paragraph, as based on a disclosure which is not enabling. Claims 31-38, 50-57, 92 and 93 are cancelled without prejudice, waiver, or disclaimer, and the rejection of these claims is therefore rendered moot. Applicant takes this action merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicant reserves the right to pursue the subject matter of these cancelled claims in a continuing application, if Applicant so chooses, and does not intend to dedicate any of the cancelled subject matter to the public. Applicant expressly reserves the right to present cancelled claims 31-38, 50-57, 92 and 93, or variants thereof, in continuing applications to be filed subsequent to the present application.

3. Rejection of Claims 1-15, 31-38, 50-57, 90, 92 and 93 under 35 U.S.C. 112, second paragraph

Claims 1-15, 31-38, 50-57, 90, 92 and 93 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being incomplete for omitting essential elements, such omission amounting to a gap between the elements. Claims 1-15, 31-38, 50-57, 90, 92 and 93 also are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claims 1-15, 31-38, 50-57, 90, 92 and 93 are also rejected under 35 U.S.C. §112, second paragraph, as allegedly being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections.

Claims 1-15, 31-38, 50-57, 90, 92 and 93 are cancelled without prejudice, waiver, or disclaimer, and the rejection of these claims is therefore rendered moot. Applicant takes this

action merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicant reserves the right to pursue the subject matter of these cancelled claims in a continuing application, if Applicant so chooses, and does not intend to dedicate any of the cancelled subject matter to the public. Applicant expressly reserves the right to present cancelled claims 1-15, 31-38, 50-57, 90, 92 and 93, or variants thereof, in continuing applications to be filed subsequent to the present application.

4. Rejection of Claims 1-15, 31-38, 50-57, 90, 92 and 93 under 35 U.S.C. §101

Claims 1-15, 31-38, 50-57, 90, 92 and 93 stand rejected under 35 U.S.C. §101 as allegedly lacking patentable utility. Claims 1-15, 31-38, 50-57, 90, 92 and 93 also are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Claims 1-15, 31-38, 50-57, 90, 92 and 93 are cancelled without prejudice, waiver, or disclaimer, and the rejection of these claims is therefore rendered moot.

5. Rejection of Claims 1, 5-7, 10, 31, 34, 35, 38, 50, 53, 54, 57, 90, 92 and 93 under 35 U.S.C. §103

Claims 1, 5-7, 10, 31, 34, 35, 38, 50, 53, 54, 57, 90, 92 and 93 have been rejected under §103(a) as allegedly being obvious over *Davis* (U.S. 4,545,054A) in view of *Deepen, et al.* (U.S. 6,223,324). Claims 1, 5-7, 10, 31, 34, 35, 38, 50, 53, 54, 57, 90, 92 and 93 are cancelled without prejudice, waiver, or disclaimer, and the rejection of these claims is therefore rendered moot.

6. Rejection of Claims 8, 9, 36, 37, 55 and 56 Under 35 U.S.C. §103

Claims 8, 9, 36, 37, 55 and 56 have been rejected under §103(a) as allegedly being obvious over to *Davis* (U.S. 4,545,054A) in view of *Deepen, et al.* (U.S. 6,223,324) and further in view of *Hanan* (U.S. 5,996,104) and *Ross* (U.S. 4,901,319). Claims 8,

9, 36, 37, 55 and 56 are cancelled without prejudice, waiver, or disclaimer, and the rejection of these claims is therefore rendered moot.

7. Newly Added Claims

Applicants submit that new claims 95-118 are allowable over the cited references.

Specifically, independent claim 95 is allowable for at least the reason that the cited references do not disclose, teach, or suggest at least the feature of “a series of delay elements each having a delay of M symbol periods, where M is greater than one and is configurable at run-time, the first delay element receiving as input the current symbol from the input stream, each of the remaining delay elements receiving as input the delayed symbol as output from the prior delay element.”

Independent claim 107 is allowable for at least the reason that the cited references do not disclose, teach, or suggest at least the feature of “a plurality of delay means each having a delay of M symbol periods, where M is greater than one and is configurable at run-time, the first delay element receiving as input the current symbol from the input stream, each of the remaining delay elements receiving as input the delayed symbol as output from the prior delay element.” The remaining new claims are dependent claims, and are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicants request that the Examiner enter and allow the above new claims.

CONCLUSION

Applicant respectfully requests that all outstanding objections and rejections be withdrawn and that this application and presently pending claims 95-118 be allowed to issue. Although some dependent claim rejections and some obviousness rejections are explicitly addressed above, the omission of arguments for other claims is not intended to be construed as an implied admission that the Applicant agrees with the rejection or finding of obviousness for the respective claim or claims. If the Examiner has any questions or comments regarding Applicant's response, the Examiner is encouraged to telephone Applicant's undersigned counsel.

Respectfully submitted,

**THOMAS, KAYDEN, HORSTEMEYER
& RISLEY, L.L.P.**

By: *Karen M. Hazzah*
Karen G. Hazzah, Reg. No. 48,472

100 Galleria Parkway, NW
Suite 1750
Atlanta, Georgia 30339-5948
Tel: (770) 933-9500
Fax: (770) 951-0933